COMOMAG INSTRUCTION 4855.1H

Subj: QUALITY ASSURANCE (QA) PROGRAM

Ref: (a) NAVSUP P-805

- (b) NAVSUP P-807
- (c) NAVSUP P-724
- (d) COMOMAGINST 4000.1P
- (e) OP 5 Vol 1
- (f) COMOMAGINST 8020.4N

Encl: (1) Quality Assurance Training Requirements

- (2) Inspection Stamp Record, COMOMAG 4855/1 (Rev. 6-03)
- (3) Discrepancy Record, COMOMAG 4855/2 (Rev. 6-03)
- 1. <u>Purpose</u>. To establish policy and provide quality assurance (QA) direction for Mobile Mine Assembly Unit/Detachment (MOMAU/MOMAD) sites.
- 2. <u>Cancellation</u>. COMOMAGINST 4855.1G. This instruction is a major revision and should be reviewed in its entirety.
- 3. <u>Background</u>. Reference (a) applies to the receipt, storage and issue processes. Reference (b) applies to fleet sentencing and segregation processes. Reference (c) applies to conventional ordnance stockpile management. Reference (d) provides uniform supply procedures for MOMAU/MOMAD sites. Reference (e) provides safety regulations for handling, storing, producing and renovating ordnance material for shore activities. Reference (f) establishes COMOMAG's Explosive Material Handling Qualification and Certification (QUAL/CERT) Program.
- 4. <u>Discussion</u>. Within the area of mine maintenance, quality assurance is the most important factor impacting safety and quality. When properly implemented, the program will aid in quality, uniformity and reliability in all aspects of mine production, maintenance and logistics.

An effective quality assurance program provides a uniform method of controlling quality throughout all phases of assembly, testing and maintenance to ensure all mines will perform as designed.

QA planning is the most effective tool available to establish product quality requirements. Quality requirements for the finished product are derived from applicable specifications and are included or referenced in job orders and work instructions. Requirements for specific inspections, tests and their location in the process will also be included, as applicable.

5. Action

- a. All MOMAU/MOMAD site Commanding Officers/Officer-in-Charge (COs/OIC) will comply with references (a) through (f) and the policies contained herein. The COs/OIC may implement command directives and procedures to enhance but may not lessen the requirements delineated in references (a) through (f).
 - b. QA Inspectors are responsible for the following:
- (1) Inspecting and monitoring all phases of assembly, testing, mine maintenance and associated components.
- (2) Monitoring, validating and authenticating, as required, the stowing and handling of mines and mine materials.
- (3) Ensure compliance with established policy as delineated in written instructions, i.e., technical manuals, ordnance publications, standard operating procedures or weapons requirements.
- (4) QA personnel will be familiar with safety procedures and requirements of the respective activity.
- c. QA personnel will monitor all additional procedures deemed appropriate by the CO/OIC to further ensure compliance with the quality assurance program, i.e., critical connections, water tight openings and critical tests. This provides the CO/OIC a degree of flexibility in managing their QA program and applying procedures and verification in areas where it is needed most.
- d. The QA and Safety Officers will brief command personnel prior to all evolutions involving ordnance and during all quarterly safety standdowns.
- e. MOMAU/MOMAD sites will maintain an aggressive and effective QA program that involves all unit personnel. It is the responsibility of all hands to contribute to the efforts of production in achieving the highest degree of efficiency.
- 6. Quality Assurance Training Requirements. All personnel whose work assignments affect the quality of ordnance material must have the knowledge and skills necessary to perform quality work. To achieve this level of expertise, personnel assigned to ordnance-related production must be provided general indoctrination, as well as specific training in the ordnance procedures to be performed. Specific requirements are listed below:
- a. Indoctrination. All newly reporting personnel or those who are newly assigned to QA will receive indoctrination on ordnance quality assurance. This segment may be accomplished by QA personnel and will achieve the following:

- (1) Familiarize personnel with ordnance quality assurance procedures contained and referenced in this instruction.
- (2) Motivate all personnel to attain the highest quality performance in ordnance related activities.
- (3) Develop an appreciation for the importance of an organized and effective ordnance quality assurance program.

The material for the QA segment of the indoctrination/training will be provided by QA personnel.

- b. QA Officer. To provide increased range and depth of quality assurance personnel, each QA officer will provide on-the-job training (OJT) through rotational work assignments. Periods of OJT must be of sufficient duration to ensure each person is fully qualified to perform the duties of that area.
- c. QA Inspectors. QA Inspectors will be provided detailed training in quality assurance procedures and the safety, quality and technical requirements of the specific ordnance material involved with their work assignments. This training should include but not be limited to OJT, classroom training lectures, material condition code tags, QA inspection stamps, ordnance grounding requirements, ordnance transportation, safety, locally developed standard operating procedures and shop travelers. QA Inspectors are required to be trained and be familiar with the task(s) assigned.
- d. QA Supervisor. The QA Supervisor, in conjunction with the Training Coordinator, will establish an ordnance indoctrination/ training program. The QA Supervisor will schedule training for all personnel who perform QA Inspector functions in the content and application of QA procedures. This training will be in addition to the indoctrination training for personnel discussed above.
- e. Supervisory personnel. Supervisory personnel will ensure OJT or classroom training is provided prior to assigning personnel to new jobs involving ordnance-related processes. Additionally, supervisory and QA personnel must be constantly alert to the need for refresher training or other specific ordnance-related requirements as evidenced by the quality of work performed.

f. General Training Requirements

- (1) New personnel destined to perform work related to ordnance material should be scheduled into the indoctrination/training program as they arrive onboard. The training may be in the form of OJT or formal classroom training.
- (2) Enclosure (1) lists required documents that should be included in the training pipeline.

- (3) Training will be conducted in the application of quality assurance provisions of other technical ordnance publications as necessary to meet specific activity needs.
- (4) Refresher quality assurance training will be provided as necessary, but at least annually. Changes in ordnance quality assurance policies or procedures will also be included in the annual review.
- (5) A comprehensive list will be compiled for follow-on training for personnel who directly affect ordnance material quality.
- g. Administrative Requirements. OJT and formal classroom training will be documented and maintained on all training conducted. Documentation will also be maintained on all QA personnel.

7. Material Condition Tags/Labels and Inspection Indication Stamps

- a. The material inspection or condition status will be identified by the appropriate material condition tags/labels specified in reference (a).
- b. Inspection stamps or the QA Inspector's signature will be used for authenticating material, verifying completed work, completing final supplement sheets and inventorying applicable Mine Allowance Database (MAD) items.
- c. In addition to the requirements set forth in reference (a), the QA Officer will issue and maintain inspection stamp records in accordance with the following:
- (1) Maintain records of stamp assignments and periodically conduct surveys to ensure the assigned numbers and types of stamps are correct and that the stamps are in good condition. The assignment record will consist of having the person to whom the stamps are issued apply each stamp issued to one of the blocks of the inspection stamp record, initial and date each stamped block. Periodic surveys will be conducted at least every six months and will consist of the same procedure used for assignment. The survey will be for all stamps assigned. Stamps that do not lend themselves to direct application to the record will be recorded by stamping and marking on a suitable material that will be attached to the record.
- (2) Using enclosure (2) or a similar locally developed form, maintain a current list by number of all stamps procured, indicating the number of stamps in each set, the type of stamps, status of the stamps (issued, not issued, damaged, lost, etc.), and the date of verification of the status. When only a portion of the stamps in a set is issued, the listing will indicate the set as issued. The inspection stamp record will indicate which of the stamps is being

list every six months.

- (3) Stamps returned because of termination of employment, transfer, recall by the QA Officer or any other reason should be held in bond for at least six months prior to reissuing them.
- (4) Old or damaged stamps will be destroyed locally. Records of destruction will be maintained for a minimum of two years.
- (5) Ensure the stamps will be on the assigned individual's person or in an approved locked storage container.
- d. Reference (a) provides requirements and examples for types of inspection indication stamps. These stamps verify material condition, critical test/visual inspection points or documentation control.

8. Documentation Control

- a. MOMAU/MOMAD site COs/OIC will establish a central ordnance documentation control system that provides for the maintenance, timely distribution and control of technical documentation for ordnance material. This single control point is a record control function only and does not necessarily include physical control of the documentation. Physical control may be accomplished through documentation repositories.
- b. The central ordnance documentation control point will perform the following functions:
- (1) Obtain, inventory and ensure the accuracy of ordnance technical documentation required by the other organizational elements or repositories.
- (2) Maintain a record of technical documents used within each organizational element. Each record will include the following information:
 - (a) The title
 - (b) Date the document was initially used at the activity
 - (c) The number of the latest change or revision
 - (d) The number of controlled documents, including copies
- (e) Issuing information to include the control number, location, date issued and the date the changes were incorporated

provide written confirmation to the documentation record control center that the change was incorporated.

- (4) Act as documentation repository for those ordnance documents judged to be more effectively used from a central point.
- (5) Process requests for ordnance technical documents initiated by other organizational elements.
- (6) When repositories issue controlled documents, records will be maintained to indicate the title, the control number and their location.
- (7) Organizations or individuals receiving ordnance technical documents will notify the central documentation control point so the necessary records and control actions can be initiated. Also, any internally generated ordnance technical documentation, such as SOPs, will be entered into the documentation control system.

NOTE: For the purposes of this instruction, technical documents are those that require periodic revision or change, such as ordnance publications, ordnance documents, standard inspections procedures (SIPs), military specifications, standards or drawings. It does not include textbooks, periodicals and standard library reference books.

- c. QA will periodically evaluate the documentation control system by conducting a random audit of all publications listed in the MOMAU/MOMAD site's Mine Allowance Database (MAD). Specific requirements include:
 - (1) Conducting a page check
- (2) Ensuring the latest revision is being used and that it contains no unauthorized pen and ink changes
- (3) Authorized changes will reference the authority and will include the initial of the person inserting the change and the date inserted.
- (4) All changes or revisions will be made per guidance stipulated in the change transmittal.
- (5) Additionally, QA will monitor inventories per the guidance established in references (a) through (d).

9. <u>Discrepancy Reporting</u>. An essential part of the QA program is the process whereby discrepancies are identified not only for necessary corrective action but also in determining the cause, aiding in process

improvement and preventing future occurrences. Communication within the chain of command is vital to QA successfully accomplishing their mission.

The QA Officer will prepare and submit to the CO a weekly QA report outlining any discrepancies noted during the previous week's operations. Discrepancies reported will include the following:

- a. Those determined to not be in compliance with written requirements contained in authorized support documents, e.g., ordnance publications, standard operating procedures, directives, etc., and
- b. Those determined to have occurred or existed during mine assembly or testing.

QA Inspectors will record discrepancies daily and report them to the QA Officer who will assign a control number. Enclosure (3) is used for reporting discrepancies. A similar locally developed form may be used.

10. Quality Assurance Safety Support

- a. QA personnel will coordinate with and fully support the site's weapons/ordnance safety program. QA personnel are not responsible for maintaining the site's safety program and required directives. This responsibility rests with the site's Safety Officer.
- b. Each person assigned to QA will act as a safety observer. He/she will make a written report regarding all safety violations and hazardous working conditions.
- c. All QA personnel will receive basic safety instructions and on-the-job safety training specifically tailored to their work area.
- d. The QA's functional statement will include specific and clearly defined procedures that establish their authority relative to safety, defined management support of the safety program and the delegated authority of safety observers.
 - e. QA will support the site's safety program by:
 - (1) Disseminating safety instructions to QA personnel
 - (2) Issuing instructions as required to each QA member
 - (3) Providing formal and on-the-job training to QA personnel

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- (4) Maintaining safety awareness by coordinating and conducting periodic safety standdowns
 - (5) By participating in safety committees to ensure a

response to reported hazardous conditions reported by QA personnel

- f. QA personnel will continuously observe their work areas for unsafe or potentially unsafe conditions and safety violations. The safety observations by QA personnel do not need to be a safety inspection requiring the use of checklist or other assessment documents and forms. Quality assurance observers will not assume the responsibility for safety or have the authority to shut down lines because of unsafe conditions. Rather, the intent is for QA personnel to remain constantly alert for unsafe conditions while performing their daily work routine.
- g. When a safety violation or a potentially hazardous condition is noted by QA personnel, the individual observing the condition will make a written report of the discrepancy to the supervisor, the site's safety officer and to the head of QA. When a safety violation is suspected but actual determination is beyond the expertise of the observer, it will be reported in the same manner as a known safety discrepancy. The activity's safety organization should be solicited to assist and determine the possible existence of a safety hazard.

11. In-process Documentation

- a. Work instructions are detailed step-by-step definitions of the work to be performed. They are required for all assembly, maintenance, test, renovation or other rework performed on ordnance materials (explosive or inert). They include but are not limited to ordnance publications, ordnance documents, standard operating procedures, weapons requirements or other ordnance documentation.
- b. Shop travelers are necessary to provide a ready indication of the current status of the weapon being processed by showing the operations and inspections that have been completed and those remaining to be accomplished. They are required on weapons, in addition to the work instructions, ordnance publications and standard operating procedures. A shop traveler must be assigned to each weapon entering the work process and will be retained with that weapon until the work is completed. Shop travelers will be processed, i.e., stamped by QA and initialed by the supervisor, as the weapon progresses through the line and not at the end of the weapons flow process.
 - c. The site CO/OIC and QA Officer will ensure the following:
- (1) Ordnance publications and technical manuals will be used for all phases of weapons processing.

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- (2) Standard operating procedures will be established for all operations that do not follow the ordnance publications in the exact order of weapons processing.
 - (3) All QA hold points listed in the publications will be

listed on the shop travelers and in the standard operating procedures.

12. QA Inspectors will be identified by wearing a green hard hat or a green ball cap. The site ${\rm CO/OIC}$ will be responsible for purchasing the QA hats using mine maintenance funds.

/s/ T. W. AUBERRY

Distribution:
COMOMAGINST 5216.1T
List I
List II (Case A, Case B (COMINEWARCOM only))
List III

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QUALITY ASSURANCE TRAINING REQUIREMENTS

- 1. Personnel assigned to the Quality Assurance Department will read and become familiar with the following:
 - * a. NAVSUP P-805, Receipt, Segregation, Storage and Issue

Segregation

- b. NAVSUP P-807, Fleet Sentencing
- c. NAVSUP P-724, Conventional Ordnance Stockpile Management
- * d. NAVSEA OP-5, VOL 1, Ammunition and Explosives Ashore Safety Regulations for Handling, Storing, Production, Renovation and Shipment
- * e. MIL-STD 129, Military Standard Marking for Shipment and Storage
- * f. Mine Engineering Field Changes/Engineering Change Instructions/Ordnance Alterations
 - g. NAVSUP P-485, Afloat Supply Procedures
 - h. NAVSUP P-437, MILSTRIP/MILSTRAP Procedures
- i. COMOMAGINST 4000.1 series, Mobile Mine Assembly Group Supply Procedures
- j. COMOMAGINST 5040.1 series, Mobile Mine Assembly Group (MOMAG) Administrative and Material (ADMAT) Assessment Program
- k. COMOMAGINST 8020.4 series, COMOMAG Explosive Material Handling Qualification and Certification (QUAL/CERT) PROGRAM
- 1. COMOMAGINST 8550.4 series, Service Mine Maintenance Workload Schedule
- m. COMOMAGINST 8023.11 series, Standard Production and Processing Procedures for Mines
- n. COMOMAGINST 8550.16 series, Mine Warfare Exercise and Training (ET) Program Management
- o. COMINEWARCOMINST C8550.5 series, Service Mine Distribution and Support Guidance
- p. OPNAVINST 8020.14 series, Department of the Navy Explosives Safety Policy
 - q. Applicable command standard operating procedures (SOPs)

Encl (1)

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- r. SW550-FO-PMS-010, Underwater Mine Maintenance Systems
- s. NAVSEAINST 8020.9 series, Non-Nuclear Ordnance and Explosives Handling Qualification and Certification Program
- t. COMLANTFLT/COMPACFLTINST 8023.5 series, Non-Nuclear Ordnance/Explosives Handling Qualification and Certification Program

2. Complete the requirements listed in reference (f).

Inspect	Stamp Set Number:			No. of Stamps						
Issued to:	Iss	Issued by:				o. of amps sued:	No St	In Set: No. of Stamps In Bond:		
Signature of Pe	rson Rece	iving Stam	nps:	SSN:	•		•			
Issue/Date	Verify	Verify	Verify	/ Veri	fy Verify		Verify		Verify	

DISCREPANCY RECORD		1. CONTROL NO.		2. ORIGINATOR		3. DATE					
4. WORK AREA/COST CENTER 5. NOME		NCLATUR	RE			6. PART IDENTIFICATION					
7. CONT/PROJ. NO.	CONT/PROJ. NO. 8. LOT/QUANTIT		9. DWG/SP	EC/QA TIP NO.	10. SOURCE	11. LOCATION OF MATERIA					
12. CLASSIFICATION OF DEFECT CRITICAL MAJOR MINOR UNKNOWN											
13. CAUSE OF DISCREPANCY MATERIAL PROCESS EQUIPMENT PERSONNEL DOCUMENTATION											
14. DESCRIPTION OF TH											
15. DISPOSITION/ACTION	TAKEN										
				46, 4071014	TAKEN VERIFIED						
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COMOMAG 4855/2 (Rev. 6-03)